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Report to the Chairman, Subcommittee on Interior and Related Agencies, Committee on Appropriations, House of Representatives

February 1991

MINERAL REVENUES

Potential Cost to Repurchase Offshore Oil and Gas Leases

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Resources, Community, and
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February 22, 1991

The Honorable Sidney R. Yates
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

This report responds to your July 1990 request that we determine the potential cost to the federal government if it were to cancel 123 oil and gas leases offshore Alaska, Florida, and North Carolina and repurchase them under the provisions of the Outer Continental Shelf Lands Act (OCSLA). Specifically, this report provides a range of costs as of December 31, 1990, that the government could be required to reimburse the lessees if the leases were cancelled.

Because of environmental concerns, these leases have been suspended for periods ranging from 4 months to over 2 years, as of December 31, 1990. Under the OCSLA, the Department of the Interior can generally cancel leases after 5 years of continuous suspension. During periods of suspension, exploration and development are prohibited. After this time, the act authorizes Interior to compensate the owner for the lesser of (1) the fair value of the lease at the time of cancellation (fair value approach) or (2) the excess of costs incurred on the lease over any revenues derived from the lease plus interest (sunk cost approach). Because of the uncertainties involved in whether and when oil and/or gas would be discovered on the 123 leases and the uncertainty as to when they might be cancelled, we did not examine the fair value approach. Instead, as agreed with your office, we used the sunk cost approach to estimate the potential cost to the government to compensate the lessees if the leases were cancelled under the OCSLA. Our estimate includes bonuses and rents, plus interest. In addition, we provide Interior's estimate of direct expenditures.[1]

Results in Brief

We estimate that as of December 31, 1990, bonuses, rents, and interest were between $889.4 million and $970.7 million for the 123 leases.

[1]A bonus is a payment made to acquire an offshore lease. Rent is the annual amount paid by a lessee for a lease which is not producing, calculated at a rate-per-acre basis. A direct expenditure is a cost, incurred after lease issuance, associated with exploration and development of the lease.

Interest will continue to accrue until the leases are cancelled. In addition, Interior's Minerals Management Service (MMS) estimates that the lessees have spent as much as $42.5 million in direct expenditures on these leases. Thus, as of December 31, 1990, under the sunk cost approach, the government could be required to reimburse the lessees for about $1 billion.

Background

The OCSLA authorizes the Secretary of the Interior to lease outer continental shelf lands to private interests for oil and gas exploration and development. The OCSLA also authorizes Interior to cancel a lease and compensate the lessee if the Secretary of the Interior determines, after a hearing, that

- continued operation of the lease would probably cause serious damage to life; property; any mineral; national security or defense; or the marine, coastal, or human environment;
- the threat of harm or damage will not disappear or decrease within a reasonable length of time; and
- the advantages of cancellation are greater than the benefits of continuing the lease.

The OCSLA states that interest will be paid to lessees as part of compensation under the sunk cost approach, but does not specify which interest rate to use or how to compute the interest. When the government pays interest, it pays simple interest unless the legislation specifies otherwise. Thus, in computing the interest related to these potential lease cancellations, we used simple interest.

Interior issued the 123 oil and gas leases offshore Alaska, Florida, and North Carolina between 1981 and 1988. MMS suspended, pursuant to the OCSLA, the Florida and Alaska leases, effective October 1, 1988, and October 1, 1989, respectively, because of restrictions contained in Interior's fiscal year 1989, 1990, and 1991 appropriation acts, and suspended the North Carolina leases, effective August 18, 1990, because of language contained in the Outer Banks Protection Act. The Congress imposed these restrictions because of concern about possible environmental damage to these offshore areas. The current suspensions prohibit the lessees from exploring and developing the leases and do not require them to make annual rent payments. The current suspensions count toward the 5 years of continuous suspension required for cancellation under the OCSLA. Table 1 shows the suspended leases by state,

when the current suspensions became effective, and the earliest date the leases could be cancelled.

Table 1: Schedule of Current Suspensions and Date When 5 Years of Continuous Suspension Will Be Met

State	No. of leases	Effective date of current suspension	End of 5-year period
Florida	73	Oct. 1, 1988	Sept. 30, 1993
Alaska	23	Oct. 1, 1989	Sept. 30, 1994
North Carolina	27	Aug. 18, 1990	Aug. 17, 1995

Potential Cost to Cancel the Leases Under the OCSLA

The potential cost to the government, as of December 31, 1990, to reimburse lessees for the bonuses, rents, and associated interest using the sunk cost approach under the OCSLA would range from $889.4 million to $970.7 million depending on the interest rate used. The compensation to lessees under the fair value approach could be more or less than under the sunk cost approach depending on the estimated oil and gas resources and their value at the time the leases are cancelled. In either case, the OCSLA only obligates the federal government to pay the lesser of the fair value or sunk costs plus interest.

The lessees paid bonus amounts of $507.8 million to acquire the 123 leases and an additional $9.9 million in rent through December 31, 1990. (See table 2.)

Table 2: Schedule by State of the Bonuses and Rents Paid for the 123 Leases, Through December 31, 1990

Dollars in millions

State	No. of leases	Bonuses	Rents	Total
Alaska	23	$95.4	$0.5	$95.9
Florida	73	107.6	4.7	112.3
North Carolina	27	304.8	4.7	309.5
Total	**123**	**$507.8**	**$9.9**	**$517.7**

To illustrate a potential range of costs for cancelling the 123 leases using the sunk cost approach under the OCSLA, we used different interest rates: the government's cost to borrow, a corporate cost to borrow, and an industry rate of return on investment. Applying the different rates and using simple interest on an annual basis, the interest costs range from a low of $371.7 million using the government's cost to borrow to a high of $453 million using the industry rate of return. Table 3 shows the potential compensation for bonuses, rents, and simple interest as of December 31, 1990, using the different interest rates. (See app. I for the annual interest rates used.)

Table 3: Potential Compensation for Lease Cancellation Using the Sunk Cost Approach, Simple Interest, and Various Interest Rates, Through December 31, 1990

Dollars in millions

	Potential compensation		
Interest rate	**Bonus/rent**	**Interest**	**Total**
Government cost to borrow	$517.7	$371.7	**$889.4**
Corporate cost to borrow	517.7	417.0	**934.7**
Industry rate of return on investment	517.7	453.0	**970.7**

Appendix II shows the amount of simple interest accrued for each year for each of the various interest rates, and appendix III gives a breakdown of the above costs by state.

In addition to the above compensation, lessees are entitled to be compensated for direct expenditures, plus interest. MMS estimated that the lessees have spent as much as $42.5 million on the 123 leases. This amount includes $1.5 million for the Alaska leases, up to $21 million for the Florida leases, and $20 million for the North Carolina leases.

We discussed lease cancellation procedures and lease activities with officials from MMS' headquarters in Washington, D.C. We verified bonus and first-year rent payments for the suspended leases offshore Alaska, Florida, and North Carolina by reviewing lease files and other documentation from MMS' regional offices in Anchorage, Alaska; New Orleans, Louisiana; and Herndon, Virginia; respectively, and MMS' Royalty Management Program in Lakewood, Colorado. MMS' Royalty Management Program provided payment schedules for subsequent years' rent, which we reviewed for consistency and completeness. We did not verify these amounts and dates to source documents because they were not stored in a readily retrievable format and totaled less than 1.5 percent of the total bonus and rent payments. Finally, we obtained lease suspension dates from copies of suspension letters MMS sent to lessees.

To calculate the interest on bonus and rent payments through December 31, 1990, we used three different interest rates for 1981 through 1990. While the OCSLA does not specify a rate of interest to compute compensation, a variety of rates could be justified on economic grounds. We selected rates representing the federal government's cost to borrow, a corporate cost to borrow, and an industry rate of return on investment. We used the government's borrowing cost because such interest rates have been used in other situations in which the government has been

required to compensate private firms and individuals. We used two private sector rates to represent alternative measures of lessees' opportunity cost for tying up their funds in offshore leases.

To represent the federal government's cost to borrow we selected the U.S. Treasury's composite long-term interest rate because investments in offshore leases are long-term, and usually do not produce revenues until several years into the lease. We used Moody's Aa corporate bond rate to represent a corporate cost of borrowing because a large proportion of the firms holding the 123 leases were represented in the Aa group. Finally, we used Standard and Poor's rate of return on book value for integrated oil companies because it is a readily recognized measure for industry rates of return on investment and includes most of the firms holding the 123 leases. For each of the three rates, we calculated interest costs from the date the federal government received each payment using simple interest.

MMS provided estimates for lessees' direct expenditures. Because this amount was small relative to the total bonus and rent cost, we did not verify the amounts with lessees or calculate interest due for these expenditures.

We performed our work from August 1990 to February 1991 in accordance with generally accepted government auditing standards. We met with MMS headquarters officials in Washington, D.C., to discuss the facts in this report, which they agreed with. However, as requested, we did not obtain written agency comments on a draft of this report.

We are sending copies of this report to interested parties and will make copies available to others upon request. Please contact me at (202) 275-7756 if you or your staff have any questions concerning the report. Other major contributors to this report are listed in appendix IV.

Sincerely yours,

James Duffus III

James Duffus III
Director, Natural Resources
Management Issues

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Abbreviations

GAO	General Accounting Office
MMS	Minerals Management Service
OCSLA	Outer Continental Shelf Lands Act

Annual Interest Rates Used to Compute Lessee Compensation

Year	Government cost to borrow[a]	Corporate cost to borrow[b]	Industry rate of return[c]
1981	12.87	14.75	18.10
1982	12.23	14.41	13.27
1983	10.84	12.42	13.09
1984	11.99	13.31	13.70
1985	10.75	11.82	11.51
1986	8.14	9.47	9.00
1987	8.64	9.68	6.76
1988	8.98	9.94	13.29
1989	8.58	9.46	12.60
1990[d]	8.79	9.57	12.83

[a]U.S. Treasury's composite rate for the unweighted average of all outstanding bonds neither due nor callable in less than 10 years.

[b]Moody's Investors Service corporate bond rate for selected Aa-rated long-term corporate bonds

[c]Standard and Poor's rate of return on book value for integrated oil companies with both international and domestic operations.

[d]The government and corporate cost to borrow are applicable through October 31, 1990. The 1990 Standard and Poor's rate was not available, so we averaged the percentage of increase in the other two rates from 1989 to 1990 and applied it to Standard and Poor's 1989 rate to obtain our estimate for 1990

Interest Accrual by Year, Simple Interest

Dollars in millions

Year	Government cost to borrow	Corporate cost to borrow	Industry rate of return
1981	$13.3	$15.2	$18.7
1982	36.1	42.5	39.1
1983	32.5	37.3	39.3
1984	47.4	52.6	54.2
1985	43.2	47.5	46.3
1986	33.9	39.5	37.5
1987	36.2	40.5	28.3
1988	39.3	43.5	58.1
1989	44.3	48.9	65.1
1990	45.5	49.5	66.4
Total[a]	**$371.7**	**$417.0**	**$453.0**

[a]Totals may not add because of rounding.

Potential Compensation by State, for Lease Cancellation Using Simple Interest and Various Interest Rates, Through December 31, 1990

Dollars in millions

Offshore leases	Government cost to borrow	Corporate cost to borrow	Industry rate of return
23 Alaska leases			
Bonus and rent	$95.9	$95.9	$95.9
Interest	18.2	20.0	26.7
Total	**114.1**	**115.9**	**122.6**
73 Florida leases			
Bonus and rent	112.3	112.3	112.3
Interest	69.0	76.8	84.0
Total	**181.3**	**189.0**	**196.3**
27 North Carolina leases			
Bonus and rent	309.5	309.5	309.5
Interest	284.5	320.3	342.3
Total	**594.0**	**629.8**	**651.8**
Total for 123 leases			
Bonus and rent	517.7	517.7	517.7
Interest	371.7	417.0	453.0
Total[a]	**$889.4**	**$934.7**	**$970.7**

[a]Totals may not add because of rounding.

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